5

10

## ABSTRACT

A redeye reduction system creates a first matrix of candidate pixels by comparing a color-and-brightness parameter of image pixels to a first threshold. Cohesive groups of candidate pixels are collected into components, and the component having the pixel with the highest color-and-brightness parameter is identified as first redeye region. The average color-and-brightness parameter and the size of the remaining components are compared to a range dependent on the values of the first redeye region, and the components having values within the range are defined as candidate components. The candidate component with the densest pixel population is defined as a second redeye pupil region. The defined redeye pupils are dilated and compared with a second threshold lower than the first threshold to generate a new list of candidate pixels. The new candidate pixels are colored dark gray and their adjacent pixels are colored a lighter gray.